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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/762,175

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Marcus Heemann

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EXAMINER

MULLIS, JEFFREY C

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/762,175

Applicant(s)

HEEMANN ET AL.

Examiner

Jeffrey C. Mullis

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-11 and 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1-04</u> . | 6) <input type="checkbox"/> Other: _____ |

Applicant's election of group I as well as the composition wherein "B" is required and "D" and "E" are not required, wherein "C" is an acrylic acid copolymer "A" is a I-c graft in the reply filed on 1-3-06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim 2 is withdrawn as being drawn to a non elected species while claims 12-15 are drawn to a non elected invention. Claims 1, 3-11 and 16-19 are therefore under consideration.

Claims 1, 3-11 and 16-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The last three lines of claim 1 are unclear in that the phrase "but not to (i-a) or (i-b)" could be interpreted as applying to the "olefinically unsaturated monomer", (i.e. emphasizing the fact that only the presence of i-c requires the presence of "B") or could be interpreted such that "B" need be present only when vinyl acetate (i.e. the only member of the i-a and i-b Markush group present in I-c). Furthermore, I-a contains no genus encompassing vinyl acetate or propionate and it therefore unclear why such a negative limitation applies to i-a . Lastly it is not clear how i-c can correspond to i-a or i-b since I-b corresponds to a mixture while no mixture is recited for I-c.

The term "alkyl poly(meth)acrylates" is not art recognized and is therefore unclear.

The term "molecular weight" is unclear where unqualified as to the type of molecular weight i.e. weight or number average (as appears in at least claim 1, 8 and 11) etc since these expressions of molecular weight vary.

The genres encompassed by applicants' components A-E overlap in that many materials are mutually encompassed by A-E. For instance the polymer of "B" can be said to be a resin as in "C" or (in some cases) a plasticizer as in "E". Therefore it is ambiguous as to whether particular composition should be viewed as having components A or B or C or D or E or all of them at once. An acrylic graft could also be viewed as any one or all of components A-C or E. This is especially confusing since different components are present at different levels and it is therefore unclear whether for instance a composition with 80% polyester falls within the scope of the claims since when viewed as a resin "A" it would while viewed as "B" would not.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, 7-11 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Ray-Chaudhuri et al., US 3,891,584, incorporated by reference by applicants.

It is noted that paragraph 32 of applicants published application discloses that applicants elected component "A" are described by '584. Note runs 16, 22 and 27 for a combination of 75 parts of the graft copolymer and 25 parts of resin as in applicants "C".

Claims 1, 3-5, 7-11 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Appel et al. (US 6,025,320).

Appel discloses that SOKALAN HP22 is a graft copolymer of 6,000 mw PEG and vinyl acetate in applicants amounts (column 3, lines 40-46) and that 60% of SOKALAN HP22 may be combined with a PEGylated alcohol as in applicants component "C" (column 4, lines 23-30).

Claims 1, 3-5, 7-11 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Gopalkrishnan (US 5,733,856).

Patentees disclose compositions having equal amounts of SOKALAN HP22 as in applicants "A" and one or two acrylic polymers (as in applicants "B" and/or "C"), i.e. each component is present at a level of 50 or 33% based on the total of acrylic polymers and SOKALAN. Note Examples 13-22 as well as column 7, line 51 –column 8, lines 15.

Claims 1, 3-11 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Brady et al. (US 5,217,798).

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Brady discloses a composition in which two different molecular weight alkylene oxide polymers are grafted with vinyl acetate (with each graft reading on applicants "A", "C" or "D" and combined at a level of 70 parts with 30 parts Gum Rosin as in applicants "C" and/or "D").

Claims 1, 3-5, 7-11 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by over Paul et al. (US 6,410,627)

Patentees disclose a composition having a "polymeric component" (such as a vinyl monomer grafted on to a polyether) at a level of greater than 40% and 10 40% "hydroxyl polymer" such as a polyester (patent claims 3 and 15). Note that the graft copolymer may be 30% PEG grafted onto 70% polyvinyl acetate at column 12, lines 5-10. Note Example 2 for a mixture of 50% of this graft with a resin.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ray-Chaudhuri et al., US 3,891,584 in view of any one of White (US US005578682A) or Shih et al. (US US006734131B2) or Rekers et al. (US US005321105A).

White, Shi and Rekers all disclose the benefit of improved processability when using bimodal molecular weight distribution polymers note White at column 1, lines 38-44, Shih at column 3, lines 9-17 and column 4, lines 25-45 and Rekers at the paragraph bridging columns 23 and 24.

The primary reference does not disclose use of bimodal polymer. However, such usage would have been obvious to practitioner having an ordinary skill in the art in order to increase processability absent any showing of surprising or unexpected results.

Claims 1, 3-5, 7-11 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul, '627, cited above .

Paul does not disclose examples using a combination of polyester and grafted polyether.

Choice of a polyester/grafted polyether from the disclosure of the patent would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in the expectation of adequate results, absent any showing of surprising or unexpected results.

Any inquiry concerning this communication should be directed to Jeffrey C. Mullis at telephone number 571 272 1075.

Jeffrey C. Mullis
J Mullis
Art Unit 1711

Jcm

3-15-06

**Jeffrey Mullis
Primary Examiner
Art Unit 1711**

